

APPENDIX C

DRAGON FIELD TACTICAL TRAINER

Leaders use the outdoor DFTT system to train advanced field tracking. This appendix provides technical information about the DFTT and discusses its components and limitations.

C-1. RETROREFLECTOR

The DFTT tracks a small retroreflector mounted on the target vehicle. This retroreflector can be placed on virtually any vehicle or item. Only the number of retroreflectors available restricts the number of targets.

C-2. FEEDBACK

During the simulated flight of the missile, the DFTT provides feedback to the firer. As the missile travels downrange, the DFTT displays the missile's alignment with the target. At the end of the mission, the DFTT displays whether the missile hit or missed; if a hit, it shows where the missile struck the target.

C-3. MULTIPLE INTEGRATED LASER ENGAGEMENT SYSTEM

Although trainers can use MILES with the DFTT, doing so is impractical. If trainers use this method of training, they will need a retroreflector and MILES belt. The MILES laser requires a clean LOS to the retroreflector. This means that trainers must not hide the retroreflector behind any obstruction such as a tree or brush pile. Leaders should not count MILES training as force-on-force training.

C-4. SCENARIO

The DFTT also allows the trainer to adjust the difficulty of the scenario to the firer's proficiency by changing—

- The target kill zone.
- The amount of target obscuration caused by the rocket blast.
- The weight lost after the gunner fires a round.

C-5. CAPABILITIES AND LIMITATIONS

The DFTT can be used either during daylight hours or periods of limited visibility.

a. Capabilities.

(1) DFTT provides feedback to the firer during the simulated flight of the missile. It shows how the missile aligns with the target as it travels downrange.

(2) After each mission, the DFTT displays whether or not the missile hit the target and, if so, where on the target it hit.

b. Limitations.

(1) Only the number of retroreflectors available to the unit restricts the number of targets presented to the firer.

(2) The afternoon or evening before scheduled training, trainers must recharge the DFTT computer from a 110-volt outlet for at least five hours.

C-6. SAFETY

Local commanders and leaders should work together to write local directives and SOPs to supplement safety precautions. The SOPs should state individual responsibilities, safety requirements, distance limits for soldiers and explosives, training locations, sequence of operations, equipment needed for handling munitions, and protection of soldiers. Directives or SOP must clearly designate each person's responsibilities in any operation involving explosives. The unit must observe safety precautions.

C-7. FIRING TABLES

Basic instructional Firing Tables 5 and 6 help new gunners learn about the DFTT.

WARNING

This equipment uses laser light. Always follow laser range safety procedures in AR 385-63 and TB MED 524. Remember—*under the following conditions*, looking directly at a laser light can blind you permanently:

- **For long periods of time.**
- **At close range.**
- **Through binoculars, telescope, or periscope at a range of less than 154 meters.**

DANGER

THIS EQUIPMENT USES HIGH VOLTAGES AND HIGH-EXPLOSIVE BLAST SIMULATORS.

YOU MUST FOLLOW ALL SAFETY PRECAUTIONS WHEN USING THIS EQUIPMENT. FAILURE TO DO SO COULD CAUSE YOU OR SOMEONE ELSE TO LOSE YOUR HEARING, SUFFER TRAUMATIC INJURY, OR DIE.

FOR INFORMATION ABOUT ARTIFICIAL RESPIRATION, SEE FM 21-11.

1. HIGH VOLTAGES.

- **FAILURE TO FOLLOW SAFETY PRECAUTIONS COULD RESULT IN DEATH ON CONTACT.**
- **DO NOT TOUCH METAL PINS WHEN CONNECTING OR DISCONNECTING POWER CORDS OR SYSTEM CABLES.**
- **DO NOT TRY TO DISASSEMBLE THE COMPUTER.**
- **DO NOT USE THE EQUIPMENT IF THE CATHODE RAY TUBE (CRT) OR CABLE IS DAMAGED.**

2. HIGH-EXPLOSIVE BLAST SIMULATORS.

- **WITHIN 70 METERS OF A LOADED BLAST SIMULATOR, WEAR HEARING PROTECTION.**
- **HANDLE BLAST SIMULATORS CAREFULLY. IF POSSIBLE, WEAR FULL HELMET AND GLOVES.**
- **KEEP BLAST SIMULATORS AWAY FROM FIRE.**
- **NEVER HANDLE A DAMAGED BLAST SIMULATOR.**
- **STAY CLEAR OF THE DANGER ZONE AT ALL TIMES.**